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Tempo L, Room 2402

28 January 1947

MEMORANDUM FOR: Mr. Barnsley  
Department of State Personnel Division  
Room 151, Walker Johnson

Upon entering the Map Division of the Office of Strategic Services in February, 1943, I received an intensive training in the various techniques of cartographic drafting, ie.: 1) The use of all drafting instruments and materials such as railroad pens, zipatone, contour pens, stick-up, Leroy lettering sets, etc.: 2) The methods of lining up and laying out a map from a cartographer's worksheet and the subsequent steps in drafting from detailed specifications: 3) The use of standard symbols, their placement, characteristics and combinations: 4) The various ways of emphasizing certain information with the use of color, tone patterns and different line weights: 5) The drafting of projections using splines, railroad curves, beam compasses, etc.: 6) The ways of representing water by hand stipple, water lines, zipatone and color: 7) The drafting and use of contours and form lines, hachures and other means of relief representation: 8) The construction of scales and their conversion and the laying out of titles and legends: 9) The use of all different type faces and sizes and the ordering of print: 10) The various methods of map reproduction such as ozalid, offset, photograph, mimeograph etc., the sizes of cameras and presses and the different types of inks and paper used in printing: 11) The retouching of negatives, opaqueing, splicing and screening. Throughout I learned the necessity for balance and unity in a map and for correct emphasis of information without distortion.

For the first five months the maps I drafted were for OSS reports dealing primarily with the economic resources, transportation, telecommunications, political data, etc., of enemy countries. At the end of this time I was transferred from the main drafting room to a special unit which handled the construction of Top Secret operational planning maps for direct use by the Joint Chiefs of Staff. Here the constant time pressure necessitated constructing maps without benefit of cartographic worksheets and specifications. Compilation and drafting, therefore, became one operation requiring a knowledge of the principles of compilation as well as drafting. I became thoroughly familiar with all types of reference maps and the methods of coordinating and plotting information gathered from maps of all scales as well as from printed data. Frequently I was sent directly to the Office of the Joint Chiefs of Staff to construct maps and charts for use that same day. There were no specifications for these and it was necessary to use independent judgment as to the quickest and most effective means of cartographic presentation. Throughout, because of the time element, a thorough cartographic check was impossible and accuracy as well as speed was absolutely essential.

In December, 1943, I became Assistant to the Chief of the Construction Unit. In this position I continued to work on operational maps but handled several OSS Top Secret "routing" maps as well. The latter involved working directly with the individual responsible for an intelligence assignment in the field, either plotting and drafting route maps in advance or constructing maps based on intelligence gathered on a particular assignment. Here I learned the fundamentals of aerial photo interpretation and the methods of compiling information solely from aerial photography. In addition I was responsible for the construction of all organizational charts. This involved the writing of technical specifications and the supervision of their construction.

In the spring of 1944 I was asked to go overseas to work in the Mediterranean Theater as Assistant to the Chief of a Special Map Unit which had been set up to construct highly detailed operational maps in the field. Here again compilation and drafting were one operation. It was necessary to be thoroughly familiar with all military grids and symbols and their uses, to interpret intelligence reports concerning exact locations, to evaluate the reliability of the sources of these reports and to plot and construct technical overlays showing enemy installations, troop movements, plans of attack, etc. This work was carried on under highest pressure, without benefit of complete equipment and materials and with no opportunity for customary review. The assignment was of seven months duration and carried on in both the Mediterranean and European Theaters.

Upon returning from overseas, I rejoined the Special Design Unit of the Map Division working on operational planning maps dealing with the proposed Pacific invasion. During this period, I became familiar with the use of the air brush and "free-hand" drafting techniques used in poster presentation.

In May 1945, I was detailed from the Map Division to the Joint Intelligence Study Publishing Board as Chief of the Cartographic Unit and Assistant to the Chief of the Graphic and Reproduction Section. This position is largely supervisory and requires a thorough knowledge of cartographic drafting procedures. By keeping in close contact with the Cartography Branch of the Department of State and other map agencies, I follow the developments in the use of new materials and techniques and frequently introduce these to the Cartography Unit of the JANIS Board. The full particulars of this, my present position, are given in Standard Form No. 75, which, I understand you already have.

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Chief, Cartography Unit, JISPB

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